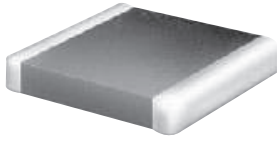


## Electrical / Environmental

## BMC

 Surface Mount Multilayer High Frequency Ceramic Chip Inductors  
 0402 - 0805 Industry Sizes


- Inductance Range 1.0nH to 270nH
- Standard Tolerance ±10%
- Operating Temperature Range -55°C to +125°C
- Ambient Temperature, Maximum 80°C
- Resistance to Solder Heat 260°C for 10 sec

## 0402 Specifications

Part Number	Inductance <sup>(1)</sup> nH	Q (Typical) @ 100/800MHz	SRF Min./Typ. MHz	DCR Max. Ω	Rated Current mA
BMC0402HF-1N0S	1.0	10/26	10000/18000	0.12	300
BMC0402HF-1N2S	1.2	10/26	10000/17000	0.12	300
BMC0402HF-1N5S	1.5	11/30	6000/11000	0.13	300
BMC0402HF-1N8S	1.8	11/30	6000/11000	0.14	300
BMC0402HF-2N2S	2.2	10/28	6000/8700	0.16	300
BMC0402HF-2N7S	2.7	10/25	6000/7800	0.17	300
BMC0402HF-3N3K	3.3	10/27	6000/6400	0.19	300
BMC0402HF-3N9K	3.9	10/24	4000/5800	0.22	300
BMC0402HF-4N7K	4.7	10/23	4000/5100	0.24	300
BMC0402HF-5N6K	5.6	10/25	4000/4700	0.27	300
BMC0402HF-6N8K	6.8	10/23	3900/4200	0.32	250
BMC0402HF-8N2K	8.2	10/26	3600/3800	0.37	250
BMC0402HF-10NK	10.0	10/21	3200/3400	0.42	250
BMC0402HF-12NK	12.0	10/22	2700/2900	0.50	250
BMC0402HF-15NK	15.0	10/22	2300/2500	0.55	250
BMC0402HF-18NK	18.0	10/24	2100/2400	0.65	200
BMC0402HF-22NK	22.0	10/25	1900/2200	0.80	200
BMC0402HF-27NK	27.0	10/25	1600/2000	0.90	200
BMC0402HF-33NK	33.0	10/21	1300/1800	1.00	200
BMC0402HF-39NK	39.0	10/23	1200/1600	1.20	150
BMC0402HF-47NK	47.0	10/18	1000/1500	1.30	150
BMC0402HF-56NK	56.0	11/17	750/1300	1.40	150
BMC0402HF-68NK	68.0	11/17	750/1250	1.40	150
BMC0402HF-82NK	82.0	11/15	600/1100	2.00	100
BMC0402HF-R10K	100.0	11/10	600/1000	2.60	100

## 0603 Specifications

Part Number	Inductance <sup>(1)</sup> nH	Q (Typical) @ 100/800MHz	SRF Min./Typ. MHz	DCR Max. Ω	Rated Current mA
BMC0603HF-1N5S	1.5	11/35	6000/13000	0.10	300
BMC0603HF-1N8S	1.8	10/31	6000/11000	0.10	300
BMC0603HF-2N2S	2.2	14/44	6000/10000	0.10	300
BMC0603HF-2N7S	2.7	12/37	6000/7000	0.10	300
BMC0603HF-3N3K	3.3	16/51	4000/5900	0.12	300
BMC0603HF-3N9K	3.9	11/31	3500/4500	0.14	300
BMC0603HF-4N7K	4.7	11/33	3500/4500	0.16	300
BMC0603HF-5N6K	5.6	15/44	3500/4000	0.18	300
BMC0603HF-6N8K	6.8	15/44	3000/3600	0.22	300
BMC0603HF-8N2K	8.2	13/37	3000/3500	0.24	300
BMC0603HF-10NK	10.0	15/40	2800/3000	0.26	300
BMC0603HF-12NK	12.0	12/30	2000/2500	0.28	300
BMC0603HF-15NK	15.0	15/34	2000/2200	0.32	300
BMC0603HF-18NK	18.0	15/31	1800/2000	0.35	300

### 0603 Specifications (Cont'd)

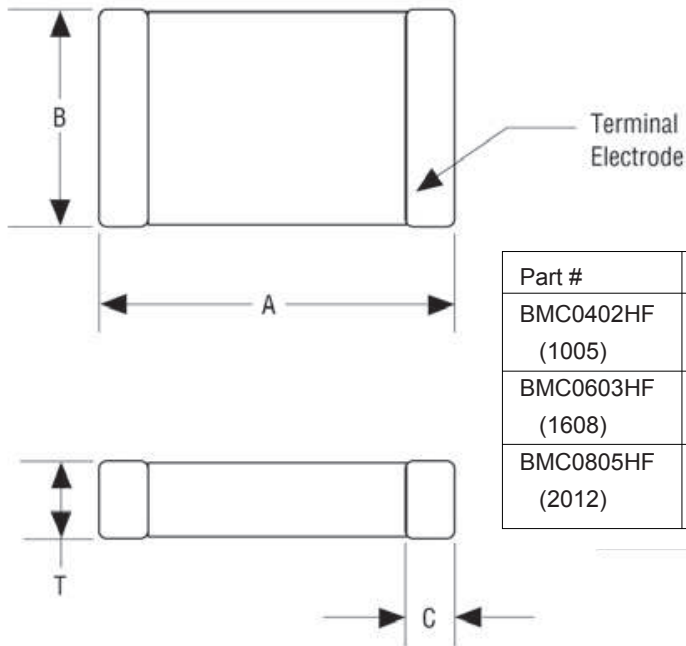
Part Number	Inductance <sup>(1)</sup> nH	Q (Typical) @ 100/800MHz	SRF Min./Typ. MHz	DCR Max. Ω	Rated Current mA
BMC0603HF-22NK	22.0	17/37	1800/1900	0.40	300
BMC0603HF-27NK	27.0	15/32	1500/1700	0.45	300
BMC0603HF-33NK	33.0	15/28	1200/1500	0.55	300
BMC0603HF-39NK	39.0	14/28	1100/1300	0.60	300
BMC0603HF-47NK	47.0	17/28	900/1300	0.70	300
BMC0603HF-56NK	56.0	19/26	900/1200	0.75	300
BMC0603HF-68NK	68.0	17/20	700/1000	0.85	300
BMC0603HF-82NK	82.0	16/18	600/1000	0.95	300
BMC0603HF-R10K	100.0	18/3	600/800	1.00	300
BMC0603HF-R12K	120.0 @ 50MHz	8/-	500/800	1.20	300
BMC0603HF-R15K	150.0 @ 50MHz	8/-	500/700	1.20	300
BMC0603HF-R18K	180.0 @ 50MHz	8/-	400/600	1.30	300
BMC0603HF-R22K	220.0 @ 50MHz	8/-	400/500	1.50	300

### 0805 Specifications

Part Number	Inductance <sup>(1)</sup> nH	Q (Typical) @ 100/800MHz	SRF Min./Typ. MHz	DCR Max. Ω	Rated Current mA
BMC0805HF-1N5S	1.5	16/55	4000/7000	0.10	300
BMC0805HF-1N8S	1.8	16/55	4000/7000	0.10	300
BMC0805HF-2N2S	2.2	16/51	4000/7000	0.10	300
BMC0805HF-2N7S	2.7	16/55	4000/6500	0.10	300
BMC0805HF-3N3K	3.3	19/65	4000/5500	0.13	300
BMC0805HF-3N9K	3.9	19/65	3000/4400	0.15	300
BMC0805HF-4N7K	4.7	19/65	3000/3500	0.20	300
BMC0805HF-5N6K	5.6	19/62	3000/3500	0.23	300
BMC0805HF-6N8K	6.8	19/55	2500/3300	0.25	300
BMC0805HF-8N2K	8.2	19/53	2000/2600	0.28	300
BMC0805HF-10NK	10.0	20/60	2000/2300	0.30	300
BMC0805HF-12NK	12.0	20/40	1500/2000	0.35	300
BMC0805HF-15NK	15.0	20/48	1500/1800	0.40	300
BMC0805HF-18NK	18.0	20/54	1300/1700	0.45	300
BMC0805HF-22NK	22.0	20/38	1200/1400	0.50	300
BMC0805HF-27NK	27.0	20/38	1000/1300	0.55	300
BMC0805HF-33NK	33.0	20/28	1000/1200	0.60	300
BMC0805HF-39NK	39.0	20/21	800/1100	0.65	300
BMC0805HF-47NK	47.0	21/17	800/1000	0.70	300
BMC0805HF-56NK	56.0	21/12	700/900	0.75	300
BMC0805HF-68NK	68.0	21/9	600/800	0.80	300
BMC0805HF-82NK	82.0	22/4	500/700	0.90	300
BMC0805HF-R10K	100.0	22/16	500/700	0.90	300
BMC0805HF-R12K	120.0 @ 50MHz	13/-	400/600	0.95	300
BMC0805HF-R15K	150.0 @ 50MHz	13/-	300/600	1.00	300
BMC0805HF-R18K	180.0 @ 50MHz	13/-	300/500	1.10	300
BMC0805HF-R22K	220.0 @ 50MHz	12/-	300/500	1.20	300
BMC0805HF-R27K	270.0 @ 50MHz	12/-	200/400	1.30	300

Note: (1) Inductance is measured at 100MHz without DC Current

### Outline Dimensions (Inches/mm)



Part #	A Dim.	B Dim.	C Dim.	T Dim.
BMC0402HF (1005)	$0.040 \pm 0.004$ 1.00 ± 0.100	$0.02 \pm 0.004$ 0.50 ± 0.100	$0.01 \pm 0.004$ 0.25 ± 0.100	$0.02 \pm 0.004$ 0.50 ± 0.100
BMC0603HF (1608)	$0.063 \pm 0.006$ 1.60 ± 0.150	$0.031 \pm 0.006$ 0.80 ± 0.150	$0.012 \pm 0.008$ 0.30 ± 0.200	$0.031 \pm 0.006$ 0.80 ± 0.150
BMC0805HF (2012)	$0.079 \pm 0.008$ 2.00 ± 0.200	$0.049 \pm 0.008$ 1.25 ± 0.200	$0.020 \pm 0.012$ 0.50 ± 0.300	$0.035 \pm 0.008$ 0.90 ± 0.200

### Packaging

**Standard:** Embossed Tape & Reel

Reel:	Diameter:	=	7" (177.8mm)
	Capacity:	BMC0402 HF	= 10,000 Units
		BMC0603 HF	= 4,000 Units
		BMC0805 HF	= 4,000 Units

### Ordering Information

Model Series	<b>BMC</b>	<b>0805</b>	<b>HF</b>	<b>4N7</b>	<b>K</b>	<b>LF</b>	Lead-Free Option
Body Dimensions: Length x Width			High Frequency	Inductance Code: First 2 digits are significant. For values below 10nH, "N" denotes the decimal point.	Inductance Tolerance: J = ±5% K = ±10% S = ±0.3nH		LF = Lead - Free (No code used for non lead-free part)